Issue Characterization: GFNMS - Fishing Activities

Problem Statement:

Specific impacts on Sanctuary resources from fishing activities are not well understood. Some of the issues related to fishing or harvesting activities to be explored by the working groups include: 1) impacts on benthic habitats from bottom fishing, 2) impacts to trophic interactions from krill harvesting, 3) impacts from trampling and harvesting of invertebrates in the intertidal, 4) gear impacts on habitats and living resources from longlining, and 5) impacts on trophic levels from overfishing of bait fish such as sardines. Although GFNMS does not directly manage specific fisheries, it does have a mandate to protect the entire sanctuary ecosystem and the authority to manage human uses that impact Sanctuary resources.

Issue Description:

The diversity and abundance of fish and invertebrate species within the Sanctuary are largely due to the variety of habitats, including intertidal mudflats, estuaries, rocky shorelines and deeper subtidal areas. The intertidal mudflats support large concentrations of burrowing organisms such as clams, snails and crabs. Eelgrass beds occur on the more extensive flats of Tomales Bay, Bolinas Lagoon and within the esteros. Pacific herring ans invertebrates depend on eelgrass beds in the Bay to spawn and feed. The shallow, protected waters of the bays and estuaries are critical habitat for salmon and several species of perch and flatfish. In their journey from the ocean through Tomales Bay and into Lagunitas Creek, the Federally listed, threatened coho salmon depend on clear water, riparian vegetative cover, and a certain size gravel to complete their reproductive process. Accurate characterizations of the deeper, subtidal habitats of the Sanctuary are limited. Rocky banks in deep water are inhabited for the most part by large populations of rockfish, more than 40 species of which occur in the Sanctuary. Sablefish and flatfish such as sole, sandab and halibut are found on offshore soft-bottom habitat
s. Concentrations of sardines, northern anchovies and Pacific herring are also found in the Sanctuary.

King salmon and rockfish are the primary target species for sport fishing in the GFNMS. On some weekend days, more than 1,000 clam diggers harvest gaper, Washington and littleneck clams. The most important commercial harvests include Pacific herring, salmon, rockfish, albacore tuna and Dungeness crab. Most of the commercial catches harvested in GFNMS are landed in San Francisco, Bodega Bay, Oakland, Half Moon Bay, and Sausalito. Clam digging is popular activity including gaper, Washington and littleneck clams. The tidal community includes a wide variety of invertebrates such as barnacles, limpets, black turban snails, mussels, sea anemones and urchins, which may be harvested as well. Gear types used in the GFNMS include: hook and line, long lines, gill nets, seines, traps, bottom trawlers and mid-water trawlers. Management of commercial and recreational fisheries in California is the responsibility of the California Department of Fish and Game (DFG) in State waters (0-3 nautical miles), and the Pacific Fishery Management Council (PFMC) in Federal waters (3 to 200 miles). In contrast, the NMSP does not manage fisheries but it does have a mandate to protect the entire sanctuary ecosystem and has authority to manage human uses that may impact sanctuary resources.

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Related Issues That Came Up During Scoping:

BIODIVERSITY AND ECOSYSTEM PROTECTION

- Need special protection of biodiversity at special places (e.g. Salinas River, kelp beds, Bolinas lagoon)
- Develop action plans specific to NMSP to help recover endangered species or key species at risk

GENERAL GFNMS FISHING ISSUES

- Ensure the fish and invertebrates are not overfished or depleted (i.e. salmon, rockfish, geoducks, horse neck clams, abalone)
- Develop programs with fishing community to promote positive aspects of fishing, such as fish stocks that are sustainable
- Coordinate with NMFS in the coho salmon recovery plan and other fishery management plans
- Pursue fishing regulations only in Federal waters
- Define Sanctuary role in fisheries management
- Regulate shore fishermen separately from commercial and sport fisherman in regards to possible management and possible fishing closures
- Ban or restrict bottom trawling in sanctuaries
- Protect biodiversity by Sanctuaries adopting more fully protected marine reserves throughout region
- Sanctuary should assist CDFG with enforcement, but should not create new regulations
- Investigate the possibility of a consumer "fish tax"
- Use money from the fishing industry to fund monitoring and replenishment projects
- Clarify language about fishing
- Sanctuary should promote/educate community about commercial fishing efforts in the sanctuary
- Sanctuaries should require low impact gear for bottom trawling
- Sanctuaries should actively support the State's Marine Life Protection Act process, in lieu of sanctuaries adoption of reserves
- Marine reserves established by the State, should be extended into Federal waters by the NMSP
- There should be a marine reserve network across all three sanctuaries. Don't wait for MLPA.
- Sanctuary should work with PFMC using existing regulatory structures
- All fishermen should be required to pass a test, before being given a license, to show that they know how to reduce environmental impacts
- Utilize fishermen for monitoring efforts
- Fishery management agencies should work more cooperatively together on issues
- Bottom trawling should cease at once in radioactive waste dumpsite

Other Efforts Underway:

- The California Dept. of Fish and Game (CDFG), under the mandate of the Marine Life Protection Act, is currently developing a pan to restructure existing marine-managed areas and to establish new marine reserves (no take zones) throughout the state. Sanctuary staff is coordinating with CDFG.
- The Pacific Fisheries Management Council (PFMC) is starting to look into using Essential Fish Habitat Reserves (EFHRs) as a fishery management tool. Sanctuary staff is coordinating with PFMC.

Federally Listed Fish Species That Occur in the Sanctuary:

T= threatened, E= endangered, SC= species of concern, *= critical habitat designation

- Central California Steelhead (T)
- Central Valley fall/late fall-run chinook salmon (c)
- Central Valley spring-run chinook salmon (T)*
- Coho salmon - central CA coast (T)*
- Green Sturgeon (SC)
- Longfin Smelt (SC)
- Northern California steelhead (T)
- Pacific lamprey (SC)
- Southern OR/Northern CA coastal chinook salmon (T)*
- Tidewater goby (E)
- Winter-run chinook salmon (E)*